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Peter K. Trzyna  
P.O. Box 7131  
Chicago, IL 60680

EXAMINER

ROSEN, NICHOLAS D

ART UNIT	PAPER NUMBER
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3625

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/785,254

Applicant(s)

GRAFF, RICHARD A.

Examiner

Nicholas D. Rosen

Art Unit

3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 9/20/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-185 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-185 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 1-185 have been examined.

In response to the Appeal Brief of September 20, 2004, a new non-final rejection is made, rejecting claims previously found allowable.

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

### **Claims 1-19, 56-89, and 126-185**

Claims 1, 4, 5, 6, 7, 14, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") and official notice. As per claim 1, Roberts discloses a data processing system programmed to change input representing property to produce output representing separate market-based valuations of each of a

Art Unit: 3625

plurality of components temporally decomposed from the property (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the apparatus includes an input device for converting input data into input signals representing the input data, and an output device to convert modified digital electrical signals into a documentation including the respective values of the components. However, official notice is taken that it is well known for data processing systems to be computers, and for such computers to be electrically connected to input and output devices for converting data into signals and signals into documentation (e.g., keyboards, display screens, and printers). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of carrying out the valuation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

As per claim 4, Roberts does not expressly disclose that at least one of the valuations reflects that at least one of the components is a limited liability component, but official notice is taken that limited liability is well known (e.g., Roberts teaches that bonds are issued by corporations, and corporations generally have limited liability). Furthermore, the components of bonds taught by Roberts can be viewed as limited liability components; i.e., the buyers of the serial zero coupon bonds disclosed by Roberts presumably have no liability beyond the risk of losing what they invest in those bonds. If the bond buyers were at risk of further liability should the corporation or other entity that issued the original bonds go into bankruptcy, that would presumably be reflected in the price of the bonds. The components in Graff are also limited liability, as Graff discloses (pages 52-53) that the residual occupancy owner has no legal obligations associated with the lease portfolio asset, and implies that the purchaser of a lease portfolio has no obligations to tenants beyond those of any property owner. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have at least one of the valuations reflect that at least one component was a limited liability component, for the obvious advantage of accurately reflecting the risks and lack of risks which an owner of such a component would face, as well as, depending on the interpretation of "limited liability component," accurately reflecting the risk, for example, that a corporation will default on its bonds, leaving the bondholders with no claim on the personal property of the corporation's stockholders.

As per claim 5, Roberts discloses that there is an “entity for” at least one of the components (in the sense that the bond-issuing corporation, municipality, etc., and the bondholder are entities for the components; see column 1, lines 23-48), but does not expressly disclose that at least one equity interest in the entity is a limited liability interest. However, official notice is taken that limited liability interests are well known (e.g., corporations, which Roberts mentions, generally have limited liability for equity interests). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant’s invention for at least one equity interest in the entity to be a limited liability interest, as set forth with regard to claim 4 above.

As per claim 6, Roberts does not disclose that the entity is a special purpose entity, but official notice is taken that special purpose entities are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant’s invention for the entity to be a special purpose entity, for the obvious advantage of carrying out temporal decomposition in the case of an entity being a special purpose entity, a common type of entity.

As per claim 7, Roberts discloses that there is an “entity for” at least one component (in the sense that the bond-issuing corporation, municipality, etc., and the bondholder are entities for the components; see column 1, lines 23-48), but does not expressly disclose that at least one of the valuations reflects that the entity is from a group consisting of a trust and a limited partnership. However, official notice is taken that trusts and limited partnerships are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant’s invention for at least

Art Unit: 3625

one of the entities to be from a group consisting of a trust and a limited partnership, for the obvious advantage of carrying out temporal decomposition in the case of an entity being a trust or a limited partnership, common types of entities which people are motivated to set up for tax advantages, avoiding probate, etc.

As per claim 13, claim 13 is held to be obvious on the same reasoning as claim 4 above.

As per claim 14, Roberts discloses that there is an "entity for" a second of the components (in the sense that the bond-issuing corporation, municipality, etc., and the bondholder are entities for the various components; see column 1, lines 23-48), but does not expressly disclose that at least one equity interest in the second entity is a limited liability interest. However, official notice is taken that limited liability interests are well known (e.g., corporations, which Roberts mentions, generally have limited liability for equity interests). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for at least one equity interest in the second entity to be a limited liability interest, as set forth with regard to claim 4 above.

As per claim 15, Roberts does not disclose that both of the entities are special purpose entities, but official notice is taken that special purpose entities are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for both of the entities to be special purpose entities, for the obvious advantage of carrying out temporal decomposition in the case of the entities being special purpose entities, a common type of entity.

As per claim 16, Roberts discloses that there is an "entity for" a second of the components (in the sense that the bond-issuing corporation, municipality, etc., and the bondholder are entities for the various components; see column 1, lines 23-48), but does not disclose that the second entity is from a group consisting of a trust and a limited partnership. However, official notice is taken that trusts and limited partnerships are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the second entity to be from a group consisting of a trust and a limited partnership, for the obvious advantage of carrying out temporal decomposition in the case of an entity being a trust or a limited partnership, common types of entities which people are motivated to set up for tax advantages, avoiding probate, etc.

Claims 2, 3, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, Graff, and official notice as applied to claim 1 above, and further in view of Kurlowicz et al. ("New Ground Rules for Trust Freezes") and the anonymous article, "Report of the House-Senate Conference Agreement on the Tax Reform Bill." As per claim 2, Roberts discloses that there is an "entity for" at least one of the components (in the sense that the bond-issuing corporation, municipality, etc., and the bondholder are entities for the components; see column 1, lines 23-48), but does not disclose the entity is from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However,



Art Unit: 3625

Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."), and "Report of the House-Senate Conference Agreement on the Tax Reform Bill" teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning "Calculation of tax liability."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entity to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out temporal decomposition in the case of the entity being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

As per claim 3, Roberts does not disclose that the entity is a special purpose entity, but official notice is taken that special purpose entities are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entity to be a special purpose entity, for the obvious advantage of carrying out temporal decomposition in the case of an entity being a special purpose entity, a common type of entity.

As per claim 11, Roberts discloses that there is an "entity for" a second of the components (in the sense that the bond-issuing corporation, municipality, etc., and the bondholder are entities for the various components; see column 1, lines 23-48).

Art Unit: 3625

Roberts does not disclose that the second entity is from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."), and "Report of the House-Senate Conference Agreement on the Tax Reform Bill" teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning "Calculation of tax liability."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the second entity to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out temporal decomposition in the case of the second entity being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

Roberts does not expressly disclose that at least one of the entities is an entity with at least one limited liability equity interest, but official notice is taken that it is well known for entities to have limited liability equity interests (e.g., corporations, which Roberts mentions, generally have limited liability for equity interests). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's

invention for at least one equity interest in the entity to be a limited liability interest, as set forth with regard to claim 4 above.

As per claim 12, Roberts does not disclose that the entity and the second entity are special purpose entities, but official notice is taken that special purpose entities are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entity and second entity to be special purpose entities, for the obvious advantage of carrying out temporal decomposition in the case of an entity and special entity being special purpose entities, a common type of entity.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, Graff, and official notice as applied to claim 5 above, and further in view of Kurlowicz et al. ("New Ground Rules for Trust Freezes") and the anonymous article, "Report of the House-Senate Conference Agreement on the Tax Reform Bill." As per claim 9, Roberts does not disclose that the entity is from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."), and "Report of the House-Senate Conference Agreement on the Tax Reform Bill" teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning "Calculation of tax liability."). Hence, it would

Art Unit: 3625

have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entity to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out temporal decomposition in the case of the entity being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

As per claim 10, Roberts does not disclose that the entity is a special purpose entity, but official notice is taken that special purpose entities are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entity to be a special purpose entity, for the obvious advantage of carrying out temporal decomposition in the case of an entity being a special purpose entity, a common type of entity.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, Graff, and official notice as applied to claim 7 above, and further in view of Kurlowicz et al. ("New Ground Rules for Trust Freezes"). Roberts does not disclose that the entity is a grantor trust, but Kurlowicz teaches grantor trusts (see paragraph beginning "The GRANT or GRUNT are both tax-favored trust structures."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention

for the entity to be a grantor trust, for the obvious advantage of enjoying the tax advantages of grantor trusts.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, Graff, and official notice as applied to claim 16 above, and further in view of Kurlowicz et al. ("New Ground Rules for Grantor Trusts"). Roberts does not disclose that both the entities are grantor trusts, but Kurlowicz teaches grantor trusts (see paragraph beginning "The GRANT or GRUNT are both tax-favored trust structures."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entities to be grantor trusts, for the obvious advantage of enjoying the tax advantages of grantor trusts.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, Graff, and official notice as applied to claim 14 above, and further in view of Kurlowicz et al. ("New Ground Rules for Trust Freezes") and the anonymous article, "Report of the House-Senate Conference Agreement on the Tax Reform Bill." As per claim 18, Roberts does not disclose that both of the entities are from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."), and "Report of the House-Senate Conference

Agreement on the Tax Reform Bill” teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning “Calculation of tax liability.”). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant’s invention for both of the entities to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out temporal decomposition in the case of the entities being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

As per claim 19, Roberts does not disclose that both of the entities are special purpose entities, but official notice is taken that special purpose entities are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant’s invention for the entity to be a special purpose entity, for the obvious advantage of carrying out temporal decomposition in the case of an entity being a special purpose entity, a common type of entity.

Claims 56-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Graff and official notice as applied to claims 1-15, 18, and 19 above, respectively, and further in view of Kurlowicz as applied to claims 2-3, 8-12, and 18-19, and also “Report of the House-Senate Conference Agreement” as applied to claims 2-3,

9-12, and 18-19. Roberts does not disclose that the property is real estate, but Graff teaches this (see entire article). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the property to be real estate, for the advantages, as stated in Graff, of separating real estate into different components advantageous to persons with different investment objectives and tax situations.

Claims 73-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Graff and official notice as applied to claims 1-15, 18, and 19 above, respectively, and further in view of Kurlowicz as applied to claims 2-3, 8-12, and 18-19, and also "Report of the House-Senate Conference Agreement" as applied to claims 2-3, 9-12, and 18-19. Roberts does not disclose that the property is tangible personal property, but official notice is taken that tangible personal property is well known, and further that it is well known to lease tangible personal property (e.g., cars and furniture). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the property to be tangible personal property, for possible tax advantages corresponding to those taught by Graff, and for the obvious advantages of obtaining an income stream or residual right to an asset, according to a particular investor's desires and circumstances.

Claims 126-185 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Graff and official notice as applied to claims 1-15, 18, and 19 above,

Art Unit: 3625

respectively, and further in view of Kurlowicz as applied to claims 2-3, 8-12, and 18-19, and also "Report of the House-Senate Conference Agreement" as applied to claims 2-3, 9-12, and 18-19, and further in view of Ginsberg (U.S. Patent 5,774,880). As per claim 126, Roberts does not disclose a second input device to receive at least some of the documentation including at least one of the valuations, the second input device operable for converting second input data representing at least one equity interest in one of the components into second input signals representing the second input data, the second input data including at least some of the documentation, but Ginsberg teaches computer terminals interconnected in data networks (column 9, line 60, through column 10, line 7), which necessarily implies input devices for converting data into signals that can be transmitted over a data network (for example, modems), and computers connected to receive the signals. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus include such a second input device, for the obvious advantage of making information included in the documentation quickly and readily available at a distance, for the purpose of trading, or other uses.

Similarly, Ginsberg teaches "viewing" of financial information by traders (*ibid.*), implying second output devices for converting signals into documentation of some type.

Neither Roberts nor Ginsberg discloses the second computer having a processor programmed to change the second signals to produce modified second signals representing a valuation of an equity interest in one of the components, but this would be quite trivial in the case of the equity interest being equal to 100% of the component



Art Unit: 3625

(as in claim 147, dependent on claim 126). Even with the equity interest equal to a smaller percentage of the component, changing the second signals to produce modified second signals representing a valuation of an equity interest in one of the components would merely entail multiplying the value of the component by an appropriate percentage, and official notice is taken that it is very well known to program computers to perform multiplication and other mathematical functions. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the second computer include a second processor programmed to change the second signals to produce modified second signals representing a valuation of an equity interest in one of the components, for the obvious advantages of sparing investors, traders, etc., with math anxiety from having to do their own arithmetic, and saving human beings the time needed to perform routine mathematical calculations.

As per claim 146, Roberts does not disclose that the equity interest is a fractional interest. However, official notice is taken that fractional interests are well known; e.g., shares of corporate stock are fractional interests in corporations; there are also fractional interests in non-incorporated partnerships. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the equity interest to be a fractional interest, for the obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the estate for years interest or remainder interest in a temporally decomposed property.

As per claim 147, Roberts does not expressly disclose that the fraction of the fractional interest is one, but does so by default, by not expressly disclosing division of components into smaller fractions.

Claims 127-145 are essentially parallel to claim 126, and rejected on essentially the same grounds.

Claims 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, and 184 are essentially parallel to claim 146, and rejected on the same grounds.

Claims 149, 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181, 183, and 185 are essentially parallel to claim 147, and rejected on the same grounds.

#### **Claims 20-26**

Claims 20, 21, 22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") and official notice. As per claim 20, Roberts discloses a data processing system programmed to change input representing property to produce modified signals representing a market-based valuation of one of at least two components temporally decomposed from the property (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the apparatus includes an input device for converting input data into input signals representing the input data, and an output device to convert modified signals into an illustration including the valuation of the component. However, official notice is taken that it is well known for

Art Unit: 3625

data processing systems to be computers, and for such computers to be electrically connected to input and output devices for converting data into signals and signals into illustrations (e.g., keyboards, display screens, and printers). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of carrying out the valuation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not expressly disclose that the at least two components are limited liability components, but official notice is taken that limited liability is well known (e.g., Roberts teaches that bonds are issued by corporations, and corporations generally have limited liability). Furthermore, the components of bonds taught by Roberts can be viewed as limited liability components; i.e., the buyers of the serial zero coupon bonds disclosed by Roberts presumably have no liability beyond the risk of losing what they

Art Unit: 3625

invest in those bonds. The components in Graff are also limited liability, as Graff discloses (pages 52-53) that the residual occupancy owner has no legal obligations associated with the lease portfolio asset, and implies that the purchaser of a lease portfolio has no obligations to tenants beyond those of any property owner. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the components to be limited liability components, for the obvious advantage of not having purchasers of the components fully and personally liable for anything that might go wrong with the property.

As per claim 21, Roberts does not expressly disclose that the valuation for the one of the components reflects that there is a respective entity for the at least two components, but Graff teaches the components temporally decomposed from property becoming owned by two respective entities (pages 54-58). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for there to be a respective entity for each of the at least two components, for the stated advantage that the respective components are likely to be preferred by entities with different investment goals and tax issues; and for the valuation to reflect this, since the decomposition would make little sense, and there would be little purpose to the valuation, if the at least two components would always remain in the hands of the same entity.

Graff does not expressly teach that at least one equity interest in each of the entities is a limited liability interest. However, official notice is taken that limited liability interests are well known (e.g., corporations, which Roberts mentions, generally have

Art Unit: 3625

limited liability for equity interests). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for at least one equity interest in the entity to be a limited liability interest, for the obvious advantage of enabling people to invest in the entity without putting all of their own property at risk.

As per claim 22, Roberts does not disclose that each of the entities is a special purpose entity, but official notice is taken that special purpose entities are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for each of the entities to be a special purpose entity, for the obvious advantage of carrying out temporal decomposition in the case of an entity being a special purpose entity, a common type of entity.

As per claim 25, Roberts does not expressly disclose that each of the entities is from a group consisting of a trust and a limited partnership. However, official notice is taken that trusts and limited partnerships are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the each of the entities to be from a group consisting of a trust and a limited partnership, for the obvious advantage of carrying out temporal decomposition in the case of an entity being a trust or a limited partnership, common types of entities which people are motivated to set up for tax advantages, avoiding probate, etc.

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, Graff, and official notice as applied to claim 21 above, and further in view of Kurlowicz et al. ("New Ground Rules for Trust Freezes") and the anonymous article

“Report of the House-Senate Conference Agreement on the Tax Reform Bill.” As per claim 23, Roberts does not disclose that each of the entities is from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, “The GRANT or GRUNT are both tax-favored trust structures.”), and “Report of the House-Senate Conference Agreement on the Tax Reform Bill” teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning “Calculation of tax liability.”). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant’s invention for each of the entities to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out temporal decomposition in the case of the entities being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

As per claim 24, Roberts does not disclose that each of the entities is a special purpose entity, but official notice is taken that special purpose entities are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant’s invention for each of the entities to be a special purpose entity, for

the obvious advantage of carrying out temporal decomposition in the case of an entity being a special purpose entity, a common type of entity.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, Graff, and official notice as applied to claim 25 above, and further in view of Kurlowicz et al. ("New Ground Rules for Trust Freezes"). Roberts does not disclose that each of the entities is a grantor trust, but Kurlowicz teaches grantor trusts (see paragraph beginning "The GRANT or GRUNT are both tax-favored trust structures."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for each of the entities to be a grantor trust, for the obvious advantage of enjoying the tax advantages of grantor trusts.

#### **Claims 27-34**

Claims 27, 28, 29, 30 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") and official notice. As per claim 27, Roberts discloses a processor programmed to change input representing property to produce output representing a market-based valuation, including taxation, of one of at least two components temporally decomposed from the property (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the computer apparatus includes an input device for converting input data into input signals representing the input data, and an output device to convert modified signals into an illustration including the respective values of the components. However, official notice is taken that it is well known for such computers to be electrically connected to input and

Art Unit: 3625

output devices (e.g., keyboards and display screens). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of carrying out the valuation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest, wherein the estate for years interest can be viewed as including an ownership interest in the property (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, the estate for years interest including an ownership interest in the property, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not disclose valuing a fractional interest in one of the least two components of property. However, official notice is taken that fractional interests are well known; e.g., shares of corporate stock are fractional interests in corporations; there are also fractional interests in non-incorporated partnerships. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Roberts's invention to a fractional interest in a component, for the



Art Unit: 3625

obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the estate for years interest or remainder interest in a temporally decomposed property.

As per claim 28, Roberts does not expressly disclose that the components are limited liability components, but official notice is taken that limited liability is well known (e.g., Roberts teaches that bonds are issued by corporations, and corporations generally have limited liability). Furthermore, the components of bonds taught by Roberts can be viewed as limited liability components; i.e., the buyers of the serial zero coupon bonds disclosed by Roberts presumably have no liability beyond the risk of losing what they invest in those bonds. The components in Graff are also limited liability, as Graff discloses (pages 52-53) that the residual occupancy owner has no legal obligations associated with the lease portfolio asset, and implies that the purchaser of a lease portfolio has no obligations to tenants beyond those of any property owner. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the components to be limited liability components, for the obvious advantage of not having purchasers of the components fully and personally liable for anything that might go wrong with the property.

As per claim 29, Roberts does not expressly disclose that there is a respective entity for each of the at least two components, but Graff teaches the components temporally decomposed from property becoming owned by two respective entities (pages 54-58). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for there to be a respective entity for each of

the at least two components, for the stated advantage that the respective components are likely to be preferred by entities with different investment goals and tax issues.

Graff does not expressly teach that at least one equity interest in each of the entities is a limited liability interest. However, official notice is taken that limited liability interests are well known (e.g., corporations, which Roberts mentions, generally have limited liability for equity interests). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for at least one equity interest in the entity to be a limited liability interest, for the obvious advantage of enabling people to invest in the entity without putting all of their own property at risk.

As per claim 30, Roberts does not disclose that each of the entities is a special purpose entity, but official notice is taken that special purpose entities are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for each of the entities to be a special purpose entity, for the obvious advantage of carrying out temporal decomposition in the case of an entity being a special purpose entity, a common type of entity.

As per claim 33, Roberts does not expressly disclose that each of the entities is from a group consisting of a trust and a limited partnership. However, official notice is taken that trusts and limited partnerships are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the each of the entities to be from a group consisting of a trust and a limited partnership, for the obvious advantage of carrying out temporal decomposition in the

case of an entity being a trust or a limited partnership, common types of entities which people are motivated to set up for tax advantages, avoiding probate, etc.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, Graff, and official notice as applied to claim 29 above, and further in view of Kurlowicz et al. ("New Ground Rules for Trust Freezes") and the anonymous article "Report of the House-Senate Conference Agreement on the Tax Reform Bill." As per claim 31, Roberts does not disclose that each of the entities is from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."), and "Report of the House-Senate Conference Agreement on the Tax Reform Bill" teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning "Calculation of tax liability."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for each of the entities to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out temporal decomposition in the case of the entities being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for

distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

As per claim 32, Roberts does not disclose that each of the entities is a special purpose entity, but official notice is taken that special purpose entities are well known. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for each of the entities to be a special purpose entity, for the obvious advantage of carrying out temporal decomposition in the case of an entity being a special purpose entity, a common type of entity.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, Graff, and official notice as applied to claim 33 above, and further in view of Kurlowicz et al. ("New Ground Rules for Trust Freezes"). Roberts does not disclose that each of the entities is a grantor trust, but Kurlowicz teaches grantor trusts (see paragraph beginning "The GRANT or GRUNT are both tax-favored trust structures."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for each of the entities to be a grantor trust, for the obvious advantage of enjoying the tax advantages of grantor trusts.

### **Claims 35-37**

Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") and official notice. As per claim 35, Roberts discloses a processor programmed to change input representing property to produce output representing a market-based valuation of one of at least two components

Art Unit: 3625

temporally decomposed from the property (column 3, line 40, through column 4, line 4).

Roberts does not expressly disclose that the computer apparatus includes an input device for converting input data into input signals representing the input data, and an output device to convert modified signals into an illustration including the respective values of the components. However, official notice is taken that it is well known for computers to be connected to input and output devices (e.g., keyboards and display screens). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of carrying out the valuation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

Neither Roberts nor Graff expressly discloses that the valuation reflects that there is a deed to the estate for years interest and a second deed to the remainder interest, but official notice is taken that it is well known to use deeds to establish

Art Unit: 3625

ownership, legal contracts, etc. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the valuation to reflect deeds to the component interests, for the obvious advantage of establishing ownership, and the terms thereof, of the component interests; and to accurately estimate the valuation consequent on such establishment.

As per claim 36, Roberts does not expressly disclose that the equity interest is a fractional interest, but official notice is taken that fractional interests are well known; e.g., shares of corporate stock are fractional interests in corporations; there are also fractional interests in non-incorporated partnerships. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Roberts's invention to a fractional interest in a component, for the obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the estate for years interest or remainder interest in a temporally decomposed property.

As per claim 37, Roberts does not expressly disclose that the equity interest includes all equity interest in one of the components, but Graff teaches each component becoming entirely owned by one entity (pages 54-58). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the equity interest to include all equity interest in one of the components, for the obvious advantage of saving the trouble of dividing equity interests when one entity finds it desirable to own all equity interest in a component.

**Claims 38-43**

Claims 38, 39, 40, 41, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") and official notice. Roberts discloses a processor programmed to change input signals representing property to produce output representing a market-based valuation of the equity interest in one of at least two components temporally decomposed from the property (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the computer apparatus includes an input device for converting input data into input signals representing the input data, and an output device electrically connected to the processor to convert modified digital electrical signals into an illustration including the valuation of the equity interest. However, official notice is taken that it is well known for such computers to be electrically connected to input and output devices (e.g., keyboards and display screens). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of carrying out the valuation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest, wherein the estate for years interest can be viewed as including an ownership interest in the property (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having

Art Unit: 3625

a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, the estate for years interest including an ownership interest in the property, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not disclose that the property is tangible personal property, but official notice is taken that tangible personal property is well known, and further that it is well known to lease tangible personal property (e.g., cars and furniture). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the property to be tangible personal property, for possible tax advantages corresponding to those taught by Graff, and for the obvious advantages of obtaining an income stream or residual right to an asset, according to a particular investor's desires and circumstances.

As per claim 39, Roberts does not expressly disclose that the equity interest is a fractional interest, but official notice is taken that fractional interests are well known; e.g., shares of corporate stock are fractional equity interests in corporations; there are also fractional equity interests in non-incorporated partnerships. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Roberts's invention to a fractional interest in a component, for the obvious advantage of pricing and trading interests smaller and more conveniently



purchasable than the whole value of the estate for years interest or remainder interest in a temporally decomposed property.

As per claim 40, Roberts does not expressly disclose that the equity interest includes all equity interest in one of the components, but Graff teaches each component becoming entirely owned by one entity (pages 54-58). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the equity interest to include all equity interest in one of the components, for the obvious advantage of saving the trouble of dividing equity interests when one entity finds it desirable to own all equity interest in a component.

As per claim 41, title is inherent to ownership (note definition 2a from the Merriam-Webster Collegiate Dictionary).

Claims 42 and 43 are parallel to claims 39 and 40, respectively, and rejected on the same grounds.

#### **Claims 44-46**

Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") and official notice. As per claim 44, Roberts discloses a processor programmed to change input representing property to produce output representing a market-based valuation of an interest in one of at least two components temporally decomposed from the property (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the processor is part of a computer apparatus including an input device for converting input data into input digital

Art Unit: 3625

electrical signals representing the input data, and an output device to convert modified signals into an illustration including the respective values of an equity interest.

However, official notice is taken that it is well known for data processing systems to be computers, and for such computers to be connected to input and output devices (e.g., keyboards and display screens). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of carrying out the valuation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not expressly disclose that the property is from a group consisting of a tax-exempt security and a portfolio of tax exempt securities, but Roberts discloses bonds issued by municipalities, government agencies, and governments at all levels (column 1, lines 23-28), and official notice is taken that it is well known for bonds issued

by municipalities and other state and local governments to be in many cases exempt from federal income tax, while U.S. Treasury bonds are generally exempt from state income tax. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Roberts's method to property from a group consisting of a tax-exempt security and a portfolio of tax exempt securities, for the obvious advantage of applying the method of restructuring debt obligations to a very common type of debt obligation.

As per claim 45, Roberts does not expressly disclose that the equity interest is a fractional interest, but official notice is taken that fractional interests are well known; e.g., shares of corporate stock are fractional equity interests in corporations; there are also fractional equity interests in non-incorporated partnerships. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Roberts's invention to a fractional interest in a component, for the obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the estate for years interest or remainder interest in a temporally decomposed property.

As per claim 46, Roberts does not expressly disclose that the equity interest includes all equity interest in one of the components, but Graff teaches each component becoming entirely owned by one entity (pages 54-58). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the equity interest to include all equity interest in one of the components, for the

obvious advantage of saving the trouble of dividing equity interests when one entity finds it desirable to own all equity interest in a component.

#### **Claims 47-49**

Claims 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") and official notice. As per claim 47, Roberts discloses a processor programmed to change input representing property to produce output representing a market-based valuation of the equity interest in one of at least two components temporally decomposed from the property (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the processor is part of a computer apparatus including an input device for converting input data into input signals representing the input data, and an output device to convert modified signals into an illustration including the respective values of the equity interest. However, official notice is taken that it is well known for data processing systems to be computers, and for such computers to be electrically connected to input and output devices (e.g., keyboards and display screens). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer electrically connected to appropriate input and output means, for the obvious advantage of carrying out the valuation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include a term interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-term interest and remainder interest (pages 50-52). Moreover, Roberts deals with

bonds, which can be regarded as having a quasi-term interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include a term interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not expressly disclose that the property is from a group consisting of a taxable fixed income security, a portfolio of taxable fixed-income securities, a portfolio of taxable and tax-exempt fixed income securities, as asset that is ratable as if it were a fixed-income security, and a portfolio of assets that is ratable as if it were a fixed income security, but Roberts discloses bonds issued by municipalities, government agencies, and governments at all levels (column 1, lines 23-28), and official notice is taken that it is well known for bonds issued by municipalities and other state and local governments to be in many cases exempt from federal income tax, while U.S. Treasury bonds are generally exempt from state income tax. Roberts likewise discloses bonds issued by corporations (column 1, lines 23-28), which are normally not tax-exempt. Moreover, Graff teaches assets ratable as if they were fixed income securities. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Roberts's method to property from a group consisting of a taxable fixed income security, a portfolio of taxable fixed-income securities, a portfolio of taxable and tax-exempt fixed income securities, as asset that is ratable as if it were a fixed-income security, and a portfolio of assets that is ratable as if

it were a fixed income security, for the obvious advantage of applying the method of restructuring debt obligations to common types of debt obligation.

As per claim 48, Roberts does not expressly disclose that the equity interest is a fractional interest, but official notice is taken that fractional equity interests are well known; e.g., shares of corporate stock are fractional equity interests in corporations; there are also fractional equity interests in non-incorporated partnerships. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Roberts's invention to a fractional equity interest in a component, for the obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the estate for years interest or remainder interest in a temporally decomposed property.

As per claim 49, Roberts does not expressly disclose that the equity interest includes all equity interest in one of the components, but Graff teaches each component becoming entirely owned by one entity (pages 54-58). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the equity interest to include all equity interest in one of the components, for the obvious advantage of saving the trouble of dividing equity interests when one entity finds it desirable to own all equity interest in a component.

#### **Claims 50-55**

Claims 50-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation") and official notice. As per claim 50, Roberts

Art Unit: 3625

discloses a processor programmed to change input representing property to produce output representing a market-based valuation of the equity interest in one of at least two components temporally decomposed from the property (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the processor is part of a computer apparatus including an input device for converting input data into input signals representing the input data, and an output device to convert modified signals into an illustration including the respective values of the components. However, official notice is taken that it is well known for data processing systems to be computers electrically connected to input and output devices (e.g., keyboards and display screens). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a digital electrical computer electrically connected to appropriate input and output means, for the obvious advantage of carrying out the valuation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different equity interests.

Roberts does not disclose that the property does not include any securities; however, it is well known to value properties which are not securities by the usual meaning of the term, and Graff, in particular, teaches applying financial analysis to real estate related assets (see especially pages 51 and 52). Hence, it would have been obvious to one of ordinary skill in the art of finance to apply the method of Robert to property not including any securities, for the obvious advantage of restructuring such property to reduce expenses.

As per claim 51, Roberts does not expressly disclose that the equity interest is a fractional interest, but official notice is taken that fractional equity interests are well known; e.g., shares of corporate stock are fractional equity interests in corporations; there are also fractional equity interests in non-incorporated partnerships. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to apply Roberts's invention to a fractional interest in a component, for the obvious advantage of pricing and trading interests smaller and more conveniently purchasable than the whole value of the estate for years interest or remainder interest in a temporally decomposed property.

As per claim 52, Roberts does not expressly disclose that the equity interest includes all equity interest in one of the components, but Graff teaches each component becoming entirely owned by one entity (pages 54-58). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the equity interest to include all equity interest in one of the components, for the



obvious advantage of saving the trouble of dividing equity interests when one entity finds it desirable to own all equity interest in a component.

As per claim 53, title is inherent to ownership (note definition 2a from the Merriam-Webster Collegiate Dictionary).

Claims 54 and 55 are parallel to claims 51 and 52, respectively, and rejected on the same grounds.

### **Claims 90 and 95**

Claims 90 and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation"), Kurlowicz et al. ("New Ground Rules for Trust Freezes") the anonymous article "Report of the House-Senate Conference Agreement on the Tax Reform Bill," Pease (U.S. Patent 5,326,104), and official notice. As per claim 90, Roberts discloses computing to produce output signals to change input representing property to produce output representing components temporally decomposed from the property, including the effect of taxes (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the processor is part of a computer apparatus including an input device for converting input data into input signals representing the input data, and an output device connected to the digital electrical computer where documentation can be generated. However, official notice is taken that it is well known for data processing systems to be digital electrical computers, and for such computers to be connected to input devices (e.g., keyboards) and output devices where documentation can be generated (e.g., printers). Hence, it would have been

obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of producing the documentation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not disclose that there is a special purpose entity for the estate for years interest and another special purpose entity for the remainder interest, wherein the special purpose entities are from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."), and "Report of the House-Senate Conference Agreement on the Tax Reform Bill" teaches entities that are allowed United States federal tax deductions for distribution

Art Unit: 3625

(see paragraph beginning "Calculation of tax liability."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entities to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out valuation of a tax in the case of the entities being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

Roberts does not expressly disclose generating documentation including the tax, although Roberts does, as noted, disclose calculating tax liability (column 3, lines 40-58). However, Pease teaches the automatic generation of tax documents (Abstract). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to generate a document including the tax at an output device, for the obvious advantage of providing legally necessary documentation to income recipients, the IRS, etc., and of enabling present or potential investors to determine their actual or potential tax liabilities, an important factor in judging whether to participate in a financial arrangement.

As per claim 95, Roberts does not disclose that the special purpose entities are grantor trusts, but Kurlowicz teaches grantor trusts (see paragraph beginning "The GRANT or GRUNT are both tax-favored trust structures."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention

for the special purpose entities to be grantor trusts, for the obvious advantage of enjoying the tax advantages of grantor trusts.

### **Claims 91 and 96**

Claims 91 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation"), Kurlowicz et al. ("New Ground Rules for Trust Freezes") the anonymous article "Report of the House-Senate Conference Agreement on the Tax Reform Bill," Luchs et al. (U.S. Patent 4,831,526), and official notice. As per claim 91, Roberts discloses computing to produce output signals to change input representing property to produce output representing components temporally decomposed from the property, (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the processor is part of a computer apparatus including an input device for converting input data into input signals representing the input data, and an output device connected to the digital electrical computer where documentation can be generated. However, official notice is taken that it is well known for data processing systems to be computers connected to input devices (e.g., keyboards) and output devices where documentation can be generated (e.g., printers). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a digital electrical computer electrically connected to appropriate input and output means, for the obvious advantage of producing the documentation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not disclose that there is a special purpose entity for the estate for years interest and another special purpose entity for the remainder interest, wherein the special purpose entities are from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."), and "Report of the House-Senate Conference Agreement on the Tax Reform Bill" teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning "Calculation of tax liability."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entities to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction

for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out valuation of a tax in the case of the entities being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

Roberts does not disclose valuation of an insurance premium for insurance on at least one of the temporally decomposed components, or generating documentation including the insurance premium, but Luchs teaches insuring property (column 4, lines 11-15), valuation of an insurance premium (column 24, lines 17-28), and producing a document including the insurance premium (Abstract; column 3, line 66, through column 4, line 25). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to value an insurance premium on at least one component, and produce documentation including the insurance premium, for the obvious advantage of protecting investors from damage or default catastrophically reducing the value of the at least one component, and profiting from underwriting insurance.

As per claim 96, Roberts does not disclose that the special purpose entities are grantor trusts, but Kurlowicz teaches grantor trusts (see paragraph beginning "The GRANT or GRUNT are both tax-favored trust structures."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the special purpose entities to be grantor trusts, for the obvious advantage of enjoying the tax advantages of grantor trusts.

**Claims 92, 93, 97, and 98**

Claims 92, 93, 97, and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation"), Kurlowicz et al. ("New Ground Rules for Trust Freezes") the anonymous article "Report of the House-Senate Conference Agreement on the Tax Reform Bill," Luchs et al. (U.S. Patent 4,831,526), Peet et al. ("Briefing"), and official notice. As per claim 92, Roberts discloses computing to process signals to change input representing property to produce output representing components temporally decomposed from the property (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the processor is part of a computer apparatus including an input device for converting input data into input signals representing the input data, and an output device connected to the digital electrical computer where documents can be produced. However, official notice is taken that it is well known for data processing systems to be computers connected to input devices (e.g., keyboards) and output devices where documents can be produced (e.g., printers). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of producing the documentation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52).

Art Unit: 3625

Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not disclose that there is a special purpose entity for the estate for years interest and another special purpose entity for the remainder interest, wherein the special purpose entities are from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."), and "Report of the House-Senate Conference Agreement on the Tax Reform Bill" teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning "Calculation of tax liability."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entities to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out valuation of a tax in the case of the entities being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United



States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

Roberts does not disclose providing wrap insurance for the equity interest in the component, but Peet discloses that providing wrap insurance is well known (see paragraph beginning "The credit enhancement cost", and also the preceding paragraph in Peet). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to provide wrap insurance for the equity interest, for the stated advantage of allowing investors to evaluate the security without concerning themselves with the creditworthiness of the unfamiliar collateral.

Roberts does not expressly disclose producing wrap insurance documentation including the insurance premium, but Luchs teaches generating insurance documentation (Abstract; column 3, line 66, through column 4, line 25). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to value an insurance premium on at least one component, and produce a document including the wrap insurance premium, for the obvious advantage of protecting investors from damage or default catastrophically reducing the value of the at least one component, and profiting from underwriting insurance.

As per claim 93, Peet teaches that the wrap insurance is credit wrap insurance which enhances credit (see paragraph beginning "The credit enhancement cost", and also the preceding paragraph in Peet); therefore papers documenting wrap insurance are credit enhancing wrap insurance documentation. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to

provide credit wrap insurance for the equity interest, the wrap insurance documentation including credit enhancing wrap insurance documentation, for the stated advantage of allowing investors to evaluate the security without concerning themselves with the creditworthiness of the unfamiliar collateral.

As per claims 97 and 98, Roberts does not disclose that the special purpose entities are grantor trusts, but Kurlowicz teaches grantor trusts (see paragraph beginning "The GRANT or GRUNT are both tax-favored trust structures."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the special purpose entities to be grantor trusts, for the obvious advantage of enjoying the tax advantages of grantor trusts.

#### **Claims 94 and 99**

Claims 94 and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation"), Kurlowicz et al. ("New Ground Rules for Trust Freezes") the anonymous article "Report of the House-Senate Conference Agreement on the Tax Reform Bill," Pease (U.S. Patent 5,326,104), and official notice. As per claim 94, Roberts discloses computing to produce output signals to change input representing property to produce output representing components temporally decomposed from the property, including the effect of taxes (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the processor is part of a computer apparatus including an input device for converting input data into input signals representing the input data, and an output device connected to the computer where

documents can be generated. However, official notice is taken that it is well known for data processing systems to be computers to be connected to input devices (e.g., keyboards) and output devices where documents can be generated (e.g., printers). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of producing the documentation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not disclose that there is a special purpose entity for the estate for years interest and another special purpose entity for the remainder interest, wherein the special purpose entities are from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see

Art Unit: 3625

paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."), and "Report of the House-Senate Conference Agreement on the Tax Reform Bill" teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning "Calculation of tax liability."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entities to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out valuation of a tax in the case of the entities being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

Roberts does not expressly disclose generating documentation including the tax, although Roberts does, as noted, disclose calculating tax liability (column 3, lines 40-58). However, Pease teaches the automatic generation of tax documents (Abstract). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to generate a document including the tax at an output device, for the obvious advantage of providing legally necessary documentation to income recipients, the IRS, etc., and of enabling present or potential investors to determine their actual or potential tax liabilities, an important factor in judging whether to participate in a financial arrangement.

As per claim 99, Roberts does not disclose that the special purpose entities are grantor trusts, but Kurlowicz teaches grantor trusts (see paragraph beginning "The GRANT or GRUNT are both tax-favored trust structures."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the special purpose entities to be grantor trusts, for the obvious advantage of enjoying the tax advantages of grantor trusts.

### **Claims 100-123**

Claims 100-123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation"), Kurlowicz et al. ("New Ground Rules for Trust Freezes") the anonymous article "Report of the House-Senate Conference Agreement on the Tax Reform Bill," Luchs et al. (U.S. Patent 4,831,526), Peet et al. ("Briefing"), and official notice. As per claim 100, Roberts discloses computing to process signals to change input representing property to produce output representing components temporally decomposed from the property (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the processor is part of a computer apparatus including an input device for converting input data into input signals representing the input data, and an output device connected to the digital electrical computer where documents can be produced. However, official notice is taken that it is well known for data processing systems to be computers connected to input devices (e.g., keyboards) and output devices where documents can be produced (e.g., printers). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's

Art Unit: 3625

invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of producing the documentation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not disclose that the property does not include any securities; however, it is well known to value properties which are not securities by the usual meaning of the term, and Graff, in particular, teaches applying financial analysis to real estate related assets (see especially pages 51 and 52). Hence, it would have been obvious to one of ordinary skill in the art of finance to apply the method of Robert to property not including any securities, for the obvious advantage of restructuring such property to reduce expenses.

Roberts does not disclose that there is a special purpose entity for at least one component, wherein the special purpose entity is are from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a

United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."), and "Report of the House-Senate Conference Agreement on the Tax Reform Bill" teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning "Calculation of tax liability."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entity to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out valuation of a tax in the case of the entities being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

Roberts does not disclose providing wrap insurance for the equity interest in the component, but Peet discloses that providing wrap insurance is well known (see paragraph beginning "The credit enhancement cost", and also the preceding paragraph in Peet). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to provide wrap insurance for the equity interest, for the stated advantage of allowing investors to evaluate the security without concerning themselves with the creditworthiness of the unfamiliar collateral.

Roberts does not expressly disclose generating documentation including the insurance premium, but Luchs teaches generating insurance documentation (Abstract; column 3, line 66, through column 4, line 25). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to value an insurance premium on at least one component, and generate a document including the insurance premium, for the obvious advantage of protecting investors from damage or default catastrophically reducing the value of the at least one component, and profiting from underwriting insurance.

As per claim 101, Peet teaches that the wrap insurance is credit wrap insurance which enhances credit (see paragraph beginning "The credit enhancement cost", and also the preceding paragraph in Peet); therefore papers documenting wrap insurance are credit enhancing wrap insurance documentation. Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to provide credit wrap insurance for the equity interest, the wrap insurance documentation including credit enhancing wrap insurance documentation, for the stated advantage of allowing investors to evaluate the security without concerning themselves with the creditworthiness of the unfamiliar collateral.

As per claims 102 and 103, Roberts discloses carrying out computations for bonds, not consisting of real estate (Abstract; column 3, line 40, through column 4, line 11).



As per claims 104 and 105, Roberts discloses carrying out computations for bonds, not including any real estate (Abstract; column 3, line 40, through column 4, line 11).

As per claims 106 and 107, Roberts does not disclose that the property is tangible personal property, but official notice is taken that tangible personal property is well known, and further that it is well known to lease tangible personal property (e.g., cars and furniture). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the property to be tangible personal property, for possible tax advantages corresponding to those taught by Graff, and for the obvious advantages of obtaining an income stream or residual right to an asset, according to a particular investor's desires and circumstances.

As per claims 108 and 109, Roberts does not disclose that the step of controlling is carried out with real estate as the property, but Graff teaches this (see entire article). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the property to be real estate, for the advantages, as stated in Graff, of separating real estate into different components advantageous to persons with different investment objectives and tax situations.

As per claims 110 and 111, Roberts does not disclose that the step of controlling is carried out with the property including real estate, but Graff teaches this (see entire article). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the property to include real estate, for the

advantages, as stated in Graff, of separating real estate into different components advantageous to persons with different investment objectives and tax situations.

As per claims 112-123, Roberts does not disclose a grantor trust as the special purpose entities, but Kurlowicz teaches grantor trusts (see paragraph beginning "The GRANT or GRUNT are both tax-favored trust structures."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the special purpose entity to be a grantor trust, for the obvious advantage of enjoying the tax advantages of grantor trusts.

#### **Claims 124-125**

Claims 124 and 125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (U.S. Patent 4,739,478) in view of Graff ("The Impact of Tax Issues on Real Estate Debt and Equity Separation"), Kurlowicz et al. ("New Ground Rules for Trust Freezes") the anonymous article "Report of the House-Senate Conference Agreement on the Tax Reform Bill," Pease (U.S. Patent 5,326,104), and official notice. As per claim 124, Roberts discloses computing to produce output signals to change input representing property to produce output representing components temporally decomposed from the property, including the effect of taxes (column 3, line 40, through column 4, line 4). Roberts does not expressly disclose that the processor is part of a computer apparatus including an input device for converting input data into input signals for receipt by a computer, and an output device connected to the computer where documents can be generated. However, official notice is taken that it is well known for data processing systems to be computers to be connected to input devices where input

Art Unit: 3625

information is entered and converted into signals for receipt by the computer (e.g., keyboards) and output devices where documentation can be produced (e.g., printers). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the apparatus comprise a computer connected to appropriate input and output means, for the obvious advantage of producing the documentation using standard, readily available computer hardware.

Roberts does not expressly disclose that the components include an estate for years interest and a remainder interest, but Graff teaches temporally decomposing property into a quasi-estate for years interest and remainder interest (pages 50-52). Moreover, Roberts deals with bonds, which can be regarded as having a quasi-estate for years interest (a stream of coupon payments) and quasi-remainder interest (the repayment at maturity). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to have the components include an estate for years interest and a remainder interest, for the obvious advantage of profiting from the separate sale of these different interests.

Roberts does not disclose that there is a special purpose entity for one component of the estate for years interest and the remainder interest, wherein the special purpose entity is from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity. However, Kurlowicz teaches pass-through entities for United States federal tax purposes (see paragraph beginning, "The GRANT or GRUNT are both tax-favored trust structures."),

Art Unit: 3625

and "Report of the House-Senate Conference Agreement on the Tax Reform Bill" teaches entities that are allowed United States federal tax deductions for distribution (see paragraph beginning "Calculation of tax liability."). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention for the entity to be from a group consisting of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, for the obvious advantage of carrying out valuation of a tax in the case of the entity being one of a pass-through entity for United States federal tax purposes and an entity that is allowed a United States federal tax deduction for distributions to holders of equity interests in the entity, with the tax benefits leading people to set up such entities.

Roberts does not expressly disclose producing documentation including the tax, although Roberts does, as noted, disclose calculating tax liability (column 3, lines 40-58). However, Pease teaches the automatic generation of tax documents (Abstract). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant's invention to produce a document including the tax at an output device, for the obvious advantage of providing legally necessary documentation to income recipients, the IRS, etc., and of enabling present or potential investors to determine their actual or potential tax liabilities, an important factor in judging whether to participate in a financial arrangement.

As per claim 125, Roberts does not disclose a grantor trust as the special purpose entities, but Kurlowicz teaches grantor trusts (see paragraph beginning "The

Art Unit: 3625

GRANT or GRUNT are both tax-favored trust structures.”). Hence, it would have been obvious to one of ordinary skill in the art of finance at the time of applicant’s invention for the special purpose entity to be a grantor trust, for the obvious advantage of enjoying the tax advantages of grantor trusts.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Peacock (U.S. Patent 4,914,570) discloses a process distribution and sharing system for a multiple processor computer system.

The anonymous article, “NBS's Data Encryption Standard Helps Protect against Electronic Crime, Sabotage and Invasion of Privacy in Distributed Computing and Communications Systems,” discloses computers multiplying numbers (very quickly, compared to humans, even in 1979). Rosenberg (“Dictionary of Banking and Financial Services”) discloses definitions of various potentially relevant terms. Rosch (“A Technical Primer on the Numeric Coprocessor”) discloses computers performing mathematical operations such as multiplication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas D. Rosen whose telephone number is 703-305-0753. The examiner can normally be reached on 8:30 AM - 5:00 PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Wynn Coggins can be reached on 703-308-1344. The fax phone number

Art Unit: 3625

for the organization where this application or proceeding is assigned is 703-872-9306.

Non-official/draft communications can be faxed to the examiner at 703-746-5574.

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*Nicholas D. Rosen*

**NICHOLAS D. ROSEN**  
**PRIMARY EXAMINER**

December 8, 2004